

WHAT IS CLAIMED IS:

1. An inkjet head, comprising:
a cavity unit having a plurality of ink pressure chambers formed at a regular interval; and
a piezoelectric unit stacked on said cavity unit to close the openings of said ink pressure chambers, said piezoelectric unit including a laminate of a plurality of piezoelectric layers and a plurality of common electrodes, and a plurality of driving electrodes formed on a top face thereof at positions corresponding to respective ones of said pressure chambers, wherein said piezoelectric layers and said common electrodes are arranged such that upper and lower halves of said piezoelectric unit in a lamination direction thereof are mirror symmetric to each other.
2. The inkjet head according to claim 1, wherein said laminate comprises a plurality of subunits, each subunit including a pair of said piezoelectric layers and one of said common electrodes interposed therebetween.
3. The inkjet head according to claim 1, wherein said piezoelectric unit includes even numbers of said piezoelectric layers and odd numbers of said common electrodes, and wherein said piezoelectric layers and said common electrodes are laminated alternately with each other.
4. The inkjet head according to claim 1, wherein said piezoelectric unit includes a pair of said common electrodes interposed between said piezoelectric layers such that distances from a center of said piezoelectric unit to respective ones of said pair of common electrodes in the lamination direction are substantially the same.
5. The inkjet head according to claim 1, wherein each of said common electrodes extends substantially over the whole area defined between said piezoelectric layers sandwiching said common electrode.
6. The inkjet head according to claim 1, wherein each of said common electrodes has an exposed portion, said exposed portion being exposed on a side surface of said piezoelectric unit.
7. The inkjet head according to claim 6, wherein each of said common electrodes is grounded through said exposed portion.
8. The inkjet head according to claim 6, further comprising a conductive pattern formed on said side surface of said piezoelectric unit, said conductive pattern being electrically connected with each of said common electrodes at said exposed portion.

9. The inkjet head according to claim 8, wherein said piezoelectric unit is provided with a surface electrode formed on a peripheral area of said top face thereof, said conductive pattern extending up to said surface electrode to be electrically connected therewith.

10. The inkjet head according to claim 6, wherein said piezoelectric unit has a substantially trapezoidal form, and
wherein said exposed portion of each of said common electrodes is exposed on an oblique side of said piezoelectric unit.

11. A piezoelectric actuator for an inkjet head, comprising:
a multilayer sheet including a plurality of piezoelectric layers and a plurality of common electrodes; and
a plurality of driving electrodes formed on an outer surface of said multilayer sheet,
wherein said piezoelectric layers and said common electrodes are arranged such that upper and lower halves of said multilayer sheet in a lamination direction thereof are substantially mirror symmetric to each other.

12. The piezoelectric actuator according to claim 11, wherein said multilayer sheet includes a plurality of sheet subunits, each sheet subunit including a pair of said piezoelectric layers and one of said common electrodes interposed therebetween.

13. The piezoelectric actuator according to claim 11, wherein said multilayer sheet includes even numbers of said piezoelectric layers and odd numbers of said common electrodes, and
wherein said piezoelectric layers and said common electrodes are laminated alternately with each other.

14. The piezoelectric actuator according to claim 11, wherein said multilayer sheet includes a pair of said common electrodes interposed between said piezoelectric layers such that distances from a center of said multilayer sheet to respective ones of said pair of common electrodes in the lamination direction are substantially the same.

15. The piezoelectric actuator according to claim 11, wherein each of said common electrodes extends substantially over the whole area defined between said piezoelectric layers sandwiching said common electrode.

16. The piezoelectric actuator according to claim 11, wherein each of said common electrodes has an exposed portion, said exposed portion being exposed on a side surface of said multilayer sheet.

17. The piezoelectric actuator according to claim 16, wherein each of said common electrodes is grounded through said exposed portion.

18. The piezoelectric actuator according to claim 16, further comprising a conductive pattern formed on said side surface of said multilayer sheet, said conductive pattern being electrically connected with each of said common electrodes at said exposed portion.

19. The piezoelectric actuator according to claim 18, wherein said multilayer sheet is provided with a surface electrode formed on a peripheral area of a top face thereof, said conductive pattern extending up to said surface electrode to be electrically connected therewith.

20. The piezoelectric actuator according to claim 16, wherein said multilayer sheet has a substantially trapezoidal form, and

wherein said exposed portion of each of said common electrodes is exposed on an oblique side of said multilayer sheet.